

**COMPOSITIONS AND METHODS FOR DETECTING *TREPONEMA*
*PALLIDUM***

ABSTRACT

5 Methods for the specific and highly sensitive detection of *Treponema pallidum* infection comprising the use of specific antigenic proteins and peptides unique to *Treponema pallidum* are provided. In particular, detection assays based recognition of acidic repeat protein are provided. The methods of the present invention are useful for detection of primary syphilis at early stages of infection. In
10 addition, the methods and compositions disclosed herein are directed to the differential detection of specific *Treponema* infections enabling the identification of causative agents for specific *Treponema* disease states: syphilis (*Treponema pallidum* subspecies *pallidum*), yaws (*Treponema pallidum* subspecies *pertenue* CDC-1 or CDC-2 strain), and bejel (*Treponema pallidum* subspecies *endemicum*).